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09/817,926	03/27/2001	Toshiro Ishimura	14428	3952

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EXAMINER

NGUYEN, LUONG TRUNG

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 01/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/817,926

Applicant(s)

ISHIMURA ET AL.

Examiner

LUONG T. NGUYEN

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 7,8 and 10-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,9 and 14-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/27/01.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Species I, Figures 1, 2, 4, readable on claims 1-6, 9, 14-24 in the reply filed on 1/18/2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

2. Claims 7-8, 10, 11-13 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 1/18/2005.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

4. Claims 1-6, 9, 14-24 are objected to because of the following informalities:

Claim 1 (lines 3, 7-8), claim 16 (lines 4, 8-9, 14), "a motion image" should be changed to --the motion image--.

Claim 1 (line 6), "an image" should be changed to --the image--.

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Claim 1 (lines 7-8), claim 16 (lines 4-5, 9, 15), “a still image” should be changed to --the still image--.

Claim 3 (line 2), “the display apparatus” should be changed to --the display device--.

Claim 16 (line 15), claim 18 (lines 5-6), “the recording circuit” should be changed to --the recording processing circuit--.

Claim 21 (line 3), “the resultant signal” should be changed to --a resultant signal--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 21, 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Kobayashi (US 4,755,873).

Regarding claim 21, Kobayashi discloses an image recording method to be implemented in an image recording apparatus that freezes an input image signal to output the resultant signal to a display device (still image monitor 33c, figure 4, column 5, lines 5-19), comprising:

a recording starting step of instructing start of image recording (VTR switch 29, figures 4-5, column 5, lines 5-19);

a displayed state judging step of judging the state of an image displayed on the display device (when operator operates freeze switch 27, a still image is displayed on still-image monitor 33c, figures 4-5, column 4, lines 10-20, column 5, lines 5-19);

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a recording mode setting step of setting a recording mode according to the result of judgment at the displayed state judging step (column 5, lines 30-49); and

a recording processing step of recording an image displayed on the display device onto a predetermined recording medium according to the result of setting at the recording mode setting step (column 5, lines 30-49).

Regarding claim 24, Kobayashi discloses an image recording method to be implemented in an image recording apparatus having the ability to select one of a motion image and a still image selected by an image selecting circuit (freeze switch 27) to output the selected image to a display device (note that video camera 46 captures motion image; when operator operates freeze switch 27, a still image is selected and displayed on still-image monitor 33c, figures 4-5, column 4, lines 10-20, column 5, lines 5-19), the image recording method comprising:

recording starting step of instructing start of image recording (VTR switch 29, figures 4-5, column 5, lines 5-19);

displayed image judging step of judging whether an image selected by the image selecting circuit and displayed on the display device is a still image or a motion image (when operator operates freeze switch 27, a still image is displayed on still-image monitor 33c, figures 4-5, column 4, lines 10-20, column 5, lines 5-19);

recording mode setting step of automatically setting a recording mode, in which one of a still image and a motion image is recorded, according to the result of judgment at the displayed image judging step (Note that the claim recites the limitation “one of” in “one of a still image and a motion image is recorded.” Therefore, only one limitation “a still image” or “a motion

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image is required for examination. Kobayashi reads on recording still image, column 5, lines 30-49);

a recording processing step of recording a still image or a motion image displayed on the display device onto a recording medium according to the result of setting at the recording mode setting step (Note that the claim recites the alternative limitation “or” in “recording a still image or a motion image.” Therefore, only one limitation “a still image” or “a motion image is required for examination. Kobayashi reads on recording still image, column 5, lines 30-49).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-2, 6, 16-17, 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (US 5,270,810) in view of Kobayashi (US 4,755,873).

Regarding claim 1, Nishimura discloses an image recording apparatus comprising:

a connector through which a motion image is inputted (the connection between endoscope 1 and processor 20, figure 1, column 3, lines 34-45, column 6, lines 3-8);

a memory which an image of a motion image inputted through the connector, which constructs one frame, is stored as still image (still image memory 34, figure 1, column 4, lines 49-68);

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display device on which an image is displayed (monitor device, figure 1, column 4, lines 1-5);

an image signal switching circuit for switching motion image inputted image through the connector and a still image read from the memory, and outputting a selected one to the display device (switch means 36, figure 1, column 4, lines 1-5, column 5, lines 9-28);

a recording processing circuit for recording a displayed image onto a predetermined recording medium according to the state of the image signal switching that performs switching (the still image displayed on the monitor is recorded on memory 38, figure 1, column 5, lines 30-40);

Nishimura fails to specifically disclose a remote controller for instructing start of image recording; and a recording control circuit when the remote controller instructs image recording, setting a recording mode of the recording processing circuit according to the state of the image signal switching circuit. However, Kobayashi teaches an endoscope includes a video camera 46, which is provided with remote control switches, including freeze switch 47, release switch 48, and VTR switch 49 (figure 4-5, column 2, lines 63-68, column 4, lines 60-65, column 5, line 65 to column 6, line 8). Therefore, it would have been obvious to one of ordinary skill in the art to modify the device in Nishimura by the teaching of Kobayashi in order to obtain an endoscope device which allows an operator performs an accurate switching operation easily and quickly, without regard to the type of endoscope used (column 6, lines 1-7).

Regarding claims 2, 17, Nishimura discloses wherein when an image displayed on the display device is a still image, if the remote controller instructs image recording, the recording

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control circuit sets a still image recording mode the recording processing circuit (the still image displayed on the monitor is recorded on memory 38, figure 1, column 5, lines 30-40).

Regarding claim 6, Nishimura discloses wherein when the remote controller instructs start image recording, the recording control circuit instructs updating of a still image stored in the memory according to the state of the image signal switching circuit, and instructs the recording circuit to record the still image updated (renewal of data, column 3, lines 64-68, column 6, lines 42-60).

Regarding claim 16, Nishimura discloses an image recording apparatus comprising:
an image selecting circuit for selecting either of motion image and a still image that are outputted (switch means 36, figure 1, column 4, lines 1-5, column 5, lines 9-28);
a display device on which a motion image or a still image selected by the image selecting circuit is displayed (monitor device, figure 1, column 4, lines 1-5);

recording processing circuit recording a motion image or a still image (video tape recorder, figure 1, column 5, lines 30-40);

an image recording medium onto which an image recorded by the recording processing circuit (memory 38, figure 1, column 5, lines 30-40).

Nishimura fails to specifically disclose a remote controller for use in instructing start of image recording; and a recording control circuit for, when image recording from the remote controller is instructed, controlling to determine a recording mode, in which one of a motion

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image and a still image is recorded by the recording circuit, responsively to selection state of the image selecting circuit.

However, Kobayashi teaches an endoscope includes a video camera 46, which is provided with remote control switches, including freeze switch 47, release switch 48, and VTR switch 49 (Note that the claim recites the limitation “one of” in “one of a motion image and a still image is recorded.” Therefore, only one limitation “a still image” or “a motion image is required for examination. Kobayashi reads on recording still image, column 5, lines 30-49; figure 4-5, column 2, lines 63-68, column 4, lines 60-65, column 5, line 65 to column 6, line 8). Therefore, it would have been obvious to one of ordinary skill in the art to modify the device in Nishimura by the teaching of Kobayashi in order to obtain an endoscope device which allows an operator performs an accurate switching operation easily and quickly, without regard to the type of endoscope used (column 6, lines 1-7).

Regarding claim 19, Nishimura discloses a still image producing circuit (still image memory circuit 34 and still image control circuit 35, figure 1, column 4, lines 49-68) that produces a still image from a motion image, wherein the motion image and the still image produced by the still image producing circuit are outputted to the image selecting circuit.

Regarding claim 20, Nishimura discloses memory in which a still image constructing one frame is stored (still image memory circuit 34, figure 1, column 4, lines 49-68).

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9. Claims 3, 5, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (US 5,270,810) in view of Kobayashi (US 4,755,873) in view of Kaku (US 6,968,119).

Regarding claims 3 and 18, Nishimura and Kobayashi fail to specifically disclose wherein when an image displayed on the display apparatus is a motion image, the remote controller instructs image recording, the recording control circuit sets a motion image recording mode for the recording processing circuit. However, Kaku teaches an electronic camera, which records both motion and still image (figure 3, column 4, lines 25-65). Therefore, it would have been obvious to one of ordinary skill in the art to modify the device in Nishimura and Kobayashi by the teaching of Kaku in order to obtain an endoscope device, which recording both motion and still image. This allows a user can review both motion and still image.

Regarding claim 5, Nishimura and Kobayashi fail to specifically disclose the recording processing circuit includes a motion image compressing processing circuit that compresses motion image, and a still image compressing processing circuit that compresses a still image; and the recording processing circuit compresses the motion image or still image according to a recording mode set by the recording control circuit. However, Kaku teaches an electronic camera, which includes a motion image compressing processing circuit that compresses a motion image and a still image compressing processing circuit that compresses a still image (figures 4-7, column 8, lines 36-59). Therefore, it would have been obvious to one of ordinary skill in the art to modify the device in Nishimura and Kobayashi by the teaching of Kaku in order to increase the capacity of the memory to store more images.

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10. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (US 5,270,810) in view of Kobayashi (US 4,755,873) in view of Taniguchi et al. (US 6,059,718).

Regarding claim 4, Nishimura and Kobayashi fail to specifically disclose an information memory in which information indicating whether an image outputted the display device via the image signal switching circuit is a still image or a motion image is stored; and the recording control circuit automatically determines a recording mode of the recording processing circuit by referring information stored in the information memory when the remote controller instructs image recording. However, Taniguchi et al. teaches an endoscope includes a freeze flag, which is stored in a memory, to judge a freeze mode (column 115, lines 57-67). Therefore, it would have been obvious to one of ordinary skill in the art to modify the device in Nishimura and Kobayashi by the teaching of Taniguchi et al. in order to indicate a freeze mode.

11. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (US 5,270,810) in view of Kobayashi (US 4,755,873) in view of Wright et al. (US 5,825,982).

Regarding claim 9, Nishimura and Kobayashi fail to specifically disclose a graphic processor for producing graphic image data in response to an instruction from the recording control circuit, wherein the image signal switching circuit outputs graphic image data generated processor to the display device. However, Wright et al. discloses the graphic overlay processor 58, which generates a series of static graphic images 64-70 that overlay onto the video image 62 displayed by the monitor 18 (figure 4, column 3, lines 62-67). Therefore, it would have been obvious to one of ordinary skill in the art to modify the device in Nishimura and Kobayashi by the teaching of Wright et al. in order to obtain a device, which includes an interface that allows a

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surgeon to remotely control surgical device and conditions of an operation room (column 1, lines 42-45).

12. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (US 5,270,810) in view of Kobayashi (US 4,755,873) in view of Sakai et al. (US 5,260,795).

Regarding claim 14, Nishimura and Kobayashi fail to specifically disclose a voice recording processing circuit that records a voice signal. However, Sakai et al. teaches a camera includes a microphone 21 for recording sounds (column 2, lines 35-49). Therefore, it would have been obvious to one of ordinary skill in the art to modify the device in Nishimura and Kobayashi by the teaching of Sakai et al. in order to obtain a device which has the ability of recording sound together with recording image data.

13. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (US 5,270,810) in view of Kobayashi (US 4,755,873) further in view of Takeuchi et al. (US 6,243,531).

Regarding claim 15, Nishimura and Kobayashi fail to specifically disclose wherein the remaining storage capacity of the recording medium, which is available for storage of information, is detected to be indicated. However, Takeuchi et al. teaches a recording apparatus includes a display circuit 116 displays the number of remaining recordable still images (figure 9, column 7, line 62 to column 8, line 5). Therefore, it would have been obvious to one of ordinary skill in the art to modify the device in Nishimura and Kobayashi by the teaching of Takeuchi et

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al. in order to allows the user know the number of recordable still images by seeing the display (column 8, lines 8-13).

14. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi (US 4,755,873) in view of Kaku (US 6,968,119).

Regarding claim 22, Kobayashi discloses wherein: if a displayed image is judged to be a still image at the displayed state judging step, a mode is set to recording mode to record a still image at the recording step (column 4, lines 5-20, column 5, lines 5-40).

Kobayashi fails to specifically disclose if the displayed image is judged to be a motion image at the displayed state judging step, mode set to the recording mode to record a motion image at the recording processing step. However, Kaku teaches an electronic camera, which records both motion and still image (figure 3, column 4, lines 25-65). Therefore, it would have been obvious to one of ordinary skill in the art to modify the device in Nishimura and Kobayashi by the teaching of Kaku in order to obtain an endoscope device, which recording both motion and still image. This allows a user can review both motion and still image.

15. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi (US 4,755,873) in view of Nishimura (US 5,270,810).

Regarding claim 23, Kobayashi fails to specifically disclose a still image updating step of, when a displayed image is judged to be a motion image at the displayed state judging step, updating a still image, and a still image recording step of recording the still image updated. However, Nishimura teaches a data renewing signal generator 26 for renewing still image (figure

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1, column 3, lines 64-68, column 6, lines 42-60). Therefore, it would have been obvious to one of ordinary skill in the art to modify the device in Kobayashi by the teaching of Nishimura in order to renew (update) still image data, which is extremely convenient from the standpoint of management of recorded data because the recorded information in the external memory can be edited into a suitable form after examination or diagnosis (column 6, lines 57-60).

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tsuji et al. (US 4,884,134) discloses video endoscope apparatus employing device shutter.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUONG T. NGUYEN whose telephone number is (571) 272-7315. The examiner can normally be reached on 7:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NGOCYEN VU can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LN
12/27/2005



LUONG T. NGUYEN
PATENT EXAMINER